



U.S. Department
of Transportation

Research and
Special Programs
Administration

400 Seventh Street, S.W.
Washington, D.C. 20590

DOT-E 9599
(THIRD REVISION)

EXPIRATION DATE: July 31, 2000

(FOR RENEWAL, SEE 49 CFR SECTION 107.109)

1. GRANTEE: AGA Puerto Rico Corp.
(formerly Liquid Air of Puerto Rico Corp.)
Catano, PR
2. PURPOSE AND LIMITATION:
 - a. This exemption authorizes the transportation in commerce of a non-DOT specification portable tank prescribed herein for use in transporting Division 2.2 material. This exemption provides no relief from any Hazardous Materials Regulation (HMR) other than as specifically stated herein.
 - b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR 172.203, 173.318, 173.320, 176.30, 176.76(h).
5. BASIS: This exemption is based on the application of AGA Puerto Rico Corporation dated March 30, 1998, submitted in accordance with 49 CFR 107.109 and a supplemental letter dated July 27, 1998.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Proper Shipping Name/ Hazardous Materials Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Argon, refrigerated liquid (cryogenic liquid)	2.2	UN1951	N/A
Nitrogen, refrigerated liquid (cryogenic liquid)	2.2	UN1977	N/A
Oxygen, refrigerated liquid (cryogenic liquid)	2.2	UN1073	N/A

7. SAFETY CONTROL MEASURES:

PACKAGING - Packaging prescribed is a non-DOT specification portable tank, designed and constructed in accordance with the ASME Code unless otherwise specified, and Gibson Cryogenics' drawings 4-40136 Rev. E, 4-4-2316 Rev. C, and related drawings on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA). The portable tank bears manufacturer's serial number 5104-1 and National Board Number 559.

a. The portable tank is to be enclosed in an ISO type frame. Design pressure is 225 psig for the inner tank. Design temperature is -320°F for the inner tank and any part, valve or fitting that may come in contact with the lading. Water capacity for inner tank is 4000 gallons, nominal. Inner tank material is SA 240 type 304 stainless steel. Jacket material is SA 285 Gr. C carbon steel or equivalent. The tank may be equipped with a road relief valve set to discharge at 24 psig.

b. The portable tank must be designed and constructed in accordance with 49 CFR 178.338, except as follows:

(1) For a portable tank used to transport oxygen, the insulation may not sustain combustion in a 99.5 percent oxygen atmosphere at atmospheric pressure when contacted with a continuously heated glowing platinum wire. The portable tank must be marked in accordance with 49 CFR 178.338-18(b)(7).

(2) Impact test is not required on SA 240 type 304 stainless steel material.

(3) Each tank in oxygen service must be provided with a manhole as prescribed in the ASME Code. Each tank having a manhole must be provided with a means of entrance and exit through the jacket, or the jacket must be marked to indicate the manway location on the tank.

(4) 49 CFR 178.338-10 does not apply.

(5) Lifting lugs, framework and any anchoring to the inner tank or tank jacket must conform with 49 CFR 178.338-13(a). A portable tank that meets the definition of "container" in 49 CFR 450.3(a)(3) must meet the requirements of 49 CFR Parts 450 through 453 and each tank design must be qualified in accordance with 49 CFR 178.270-13(c).

(6) A portable tank constructed for oxygen service must be thoroughly cleaned to remove all foreign material in accordance with CGA Pamphlet G-4.1. All loose particles from fabrication, such as weld beads, dirt, grinding wheel debris, and other loose materials, must be removed prior to final closure of the manhole of the tank. Chemical or solvent cleaning with a material compatible with the intended lading must be performed to remove any contaminants likely to react with the lading.

(7) "DOT-E 9599" must replace the mark "MC 338".

c. Each portable tank must conform with the provisions of 49 CFR 173.318 as applicable for the lading. The provisions of 49 CFR 173.320 apply only to transportation by highway.

8. SPECIAL PROVISIONS.

a. A person who is not a holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modifications or changes are made to the package and it is reoffered for transportation in conformance with this exemption and the HMR.

b. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

c. Each portable tank must be plainly marked on both sides near the middle in letters at least two inches high on a contrasting background, "DOT-E 9599".

d. In addition, a written record of the portable tank lading pressure and ambient (outside) temperature at the following times must be prepared for each shipment by cargo vessel:

- (i) At the start of each trip;
- (ii) Immediately before and after any manual venting;
- (iii) At least once every 24 hours; and
- (iv) At the destination point.

e. Each tank must be reinspected and retested once every 5 years in accordance with 49 CFR 173.32(e) as prescribed for DOT Specification 51 portable tanks at a pressure of 1-1/4 times the sum of the design pressure plus static head, plus 14.7.

f. Transportation aboard a cargo vessel must conform with the following:

(1) Each portable tank must conform with 49 CFR 176.76(h).

(2) A portable tank may not be offered for transportation unless the pressure of the lading in the tank is equal to or less than that used to determine the marked rated holding time (MRHT), and the one way travel time (OWTT). The OWTT is determined from the formula:

$$OWTT = MRHT - 24$$

(3) Each tank's actual holding time must be determined after each shipment. If examination indicates that the actual holding time is less than 90 percent of the MRHT of the tank, the tank may not be refilled until it is restored to its MRHT or tank is remarked with the reduced holding time determined by this examination.

(4) The OWTT must be marked on the shipping paper immediately after the container description.

(5) The road relief valve must be rendered inoperable during transportation by vessel.

f. No new construction is authorized.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle and cargo vessel.
10. MODAL REQUIREMENTS: A copy of this exemption must be carried aboard each vessel and motor vehicle used to transport packages covered by this exemption.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. Section 5101 et seq:
 - o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
 - o Registration required by 49 CFR 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in 49 CFR 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by 49 CFR 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (49 CFR 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incident involving the package and shipments made under the terms of this exemption.

Issued at Washington, D.C.:

Ann Mazzulli
for Alan I. Roberts
Associate Administrator for
Hazardous Materials Safety

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(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590. Attention: DHM-31.

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

Copies of exemptions may be obtained from the AAHMS, U.S. Department of Transportation, 400 7th Street, Washington, DC 20590-0001, Attention: Records Center, 202-366-5046.

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PO: sdc